

BIBLIOGRAPHY

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ABSTRACT

This study was conducted to Identify and describe the structure of the Kerobee Farm products supply chain, determine the major chain actors, identify and Describe the distribution chain and analyze the product flow involved and identify the performance of Kerobee farm in terms of marketing.

The study was conducted in Ambiong La Trinidad Benguet, at the Kerobee farm and with its three major outlet located in La Trinidad and in Baguio City.

For the structure of Kerobee farm products supply chain, from Kerobee farm to the three different outlets (Benguet State University marketing center, La Trinidad Organic Products, Good Shepherd) to the end-user.

Kerobee farm produces the apiary products, then distributes to its retailers (the Benguet State University marketing center, La Trinidad Organic Products, Good Shepherd). It links Between Kerobee farm to the end-user, the packaging supplier It makes standard packaging materials for Kerobee farm products.

Kerobee farm are very innovative, they produce quality products by using organic materials. Kerobee farm shows its concern for health of its consumers by producing a variety of products beneficial to the health of its consumer.

Recommendations for Kerobee farm are, Kerobee farm's culture of producing consumer friendly products laudable. This attitude should be continued. However, in order to better understand and serve the consumers, the farm needs to determine the acceptability of their products and scan for the specific preferences of the consumers. This will help them in decision as to what innovations must be done or what product lines to be added. Kerobee farm should acquire Bureau of Food and Drugs license in order to expand his market and for the assurance of the consumers that his products are safe and has, efficacy, purity, and a good quality. The farm should consider offering products in sizes or forms more convenient to consumers.



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INTRODUCTION

Rationale of the Study

Beekeeping is an important component of agriculture. Aside from its nutritional and economic contribution, it also contributes to ecological balance. This venture is viewed as a potential industry for the development of the localities because it can provide employment to people in the rural communities. Beekeeping can be dependable agricultural occupation only when the beekeeper has the technical knowledge together with effective marketing and financial management, and also farm record keeping skills.

Bees are chief agents in hastening the propagation of plants through cross pollination. These bees are also used in various experiments to detect pollution, in soil analysis and to some extent to determine the toxicity in plant. Honey is used mainly used in the Philippines as health food. Pharmaceutical companies utilize it as a base for cough syrup and energy drink. Pollen and royal jelly are components of energy pills and capsules. Bee products are also used in beautifying agents by cosmetics companies.

American period is the start of beekeeping in the Philippines. Few people in the Philippines were engaged in beekeeping, but still they cannot produce the demand in the points to a great opportunity for entrepreneur to engage in beekeeping industry.

One producer of apiary products is Kerobee farm located in Ambiong La Trinidad Benguet. Owned and operated by Mr. Romeo Awas Kimbungan, Kero is from the combination of the family member's name. One time, Mr. Romeo Kimbungan visited one of his friends and noticed that his friend is engage in beekeeping. That was the start of his interest in beekeeping. He then joined training on beekeeping. In 1992, he started beekeeping with 5 colonies of bees having a working capital of P20,000. Mr. Kimbungan



focus more on honey production until such time that he was able to register his business at Department of Trade and Industry (DTI) with a trade name KEROBEE in 1997. His products were tea, honey, bee pollen and honey wine, which is through fermentation. The month of November is the start where flowers bloom until the month of April. This is the time when bees go out and collect pollen from different flowering plants and bring it to the colony. For the month of May until October, flowering plants are few so what he does is supplemental feeding with sugar being mixed with water in a specific ratio. For harvesting of honey, he has his machine that would extract honey. He personally delivers his products using his own car. For about 16 years in beekeeping, the reason why his business still exists is that he makes himself updated to the new technology in beekeeping through internet especially on what's going on in the world of beekeeping. As of now, he has about 200 colonies of bees in Tublay, Tuba, Itogon, La Trinidad and Baguio. Mr. Romeo Awas Kimbungan first products are honey and honey wine and his production area is in LaTrinidad, his first outlets are located at Swap (small stalls) and in Mines View (small stalls), but because of the unloyalty of the outlets he then decides to stop delivering his product to them. Mr. Kimbungan convinces BSU Marketing Center to sell his product by assuring that he will be the one in charge in advertising the products. Good Shepherd are the one who convince Mr. Kimbungan to produce more volume of honey for more products ensuring that they will help him in selling his products and LaTrinidad organic products (LATOP) is also one of the major outlet of Kerobee farm. Mr. Kimbungan develops different products like the different tea's and the bee pollen, and as of now he is trying to develop soap from honey He is also conducting seminar on basic beekeeping where it is about PhP2000 per head.



Statement of the Problem

Given the multitude of products of Kerobee and the limited outlets it services there is a need to:

1. Describe the supply chain adapted by Kerobee farm.
2. Determine main players of Kerobee farm's in supply chain, in terms of their:
 - a. function
 - b. role
 - c. relationship
3. What is the performance of Kerobee farm in terms of its marketing?

Objective of the Study

Base on the need to understand Kerobee's marketing channels, the study aims to:

1. Identify and describe the structure of the Kerobee farm products supply chain and profile the major chain actors.
2. Identify and describe the distribution chain and analyze the products flow involved as to:
 - a. Primary Activities
 - a1) Inbound logistics
 - a2) Outbound logistics
 - a3) Marketing
 - b. Support Activities
 - b1) Procurement
 - b2) Technology
 - b3) Human Resource Management



b4) Firm Infrastructure

3. Describe the performance of Kerobee farm in terms of its marketing.

Importance of the Study

The study was conducted to document the admirable supply chain and marketing culture of Kerobee farm as well as identify the unit channels for its products. As such, result of the study could pinpoint which of the practices should be emulated by other practitioners and entrepreneur to improve their operations, as well as identify the marketing aspects that kerobee could improve upon thereby further strengthening its operation and improving its performance. It will also describe the admirable supply chain management of Kerobee farm. Over all, improved operation for individual practitioners could aid in the efficiency of marketing apiary product and strengthening the domestic apiculture industry.

Scope and Limitation of the Study

The study is limited to documenting the kerobee farm marketing culture, supply chain and its marketing channels. Marketing culture refers to the firm's attitude, values, goals, and practices towards serving the market. Supply chain is a business processes, from end user through original suppliers, supply chain will fulfill customer demands through the most efficient use of resources, including distribution capacity, inventory and labor. The marketing channels for its products will simply be identified and classified and a simple profiling of buyers of products will be done.



REVIEW OF LITERATURE

Apiary

An apiary (also known as bee yard) is the land or area where a person purposely places multiple beehives for bees to live in. The apiary may be built to assist with farming, to collect honey, or both. An apiary is beneficial to the farmland that surrounds it because it encourages bees to stay in the area. In turn, bees aid in pollination, which helps vegetables and fruit to grow. Typically, one beehive provides enough bees to pollinate one acre of crops. In an apiary, multiple beehives are set on pallets. Special scents are used to attract queen honeybees to the hives. While the queen sits in the beehive, she sends her workers out to collect pollen and nectar from area flowers. The pollen is used by the colony of bees as protein to keep them well nourished as they go about their tasks. After the worker bees ingest the nectar they collect, they regurgitate it and store it in the honeycombs within the beehive. This is how honey is made (Kietzman, 2003-2008).

Marketing

Marketing is not limited to business; marketing has a broad meaning, In business marketing is an activity. Marketing activities and strategies result in making products available that satisfy customers while making profits for the companies that offer those products (Bellis, 1997).

A company's marketing system must operate within the framework of forces that constitute the system's environment. These forces are either internal or external to the firm. The internal forces are inherit to the organization and are controlled by



management. The external forces, which generally cannot be controlled by the firm, that are divided into two, the macro influence such as demography, economic conditions, social and cultural forces, political and legal forces, technology, and competition. The second one is the micro environment; this group includes suppliers, marketing intermediaries, and customers. These micro elements, while external, are closely related to specific company and are included as part of the company's total marketing system (Stanton, 1984).

The external macro environment is considerable effect on any marketing system; Demography: tell marketers who current and potential customers are, where they are, and how many are likely to buy what the marketer is selling. It the statistical study of human population and its distribution, in terms of size, density, location, age, sex, race, occupation, and other statistics. It is especially important to marketing executives, because people constitute markets. Changes in the demographic environment can result in significant opportunities and threats presenting themselves to the organization. Major trends for marketers in the demographic environment include worldwide explosive population growth; a changing age, ethnic and educational mix; new types of households; and geographical shifts in population (Gautam, 2008).

Economic condition; people alone do not make a market. They must have money to spend and be willing to spend it. The condition of the economy is significant force that affects the marketing system of any organization. The economic environment consists of factors that affect consumer purchasing power and spending patterns. Economic factors include business cycles, inflation, unemployment, interest rates, and income. Changes in major economic variables have a significant impact on the marketplace. For example,



income affects consumer spending which affects sales for organizations. According to *Engel's Laws*, as income rises, the percentage of income spent on food decreases, while the percentage spent on housing remains constant (Gautam, 2008).

Social and cultural force; It is the most difficult uncontrollable variables to predict. It is important for marketers to understand and appreciate the cultural values of the environment in which they operate. The cultural environment is made up of forces that affect society's basic values, perceptions, preferences, and behaviors, values and beliefs include equality, achievement, youthfulness, efficiency, practicality, self-actualization, freedom, humanitarianism, mastery over the environment, patriotism, individualism, religious and moral orientation, progress, materialism, social interaction, conformity, courage, and acceptance of responsibility. Changes in social/cultural environment affect customer behavior, which affects sales of products. Trends in the cultural environment include individuals changing their views of themselves, others, and the world around them and movement toward self-fulfillment, immediate gratification, and secularism (Gautam, 2008).

Political and legal force; to an increasing extent, every company's conduct is influence by the political legal process in the society. Legislation at all levels exercise more influence on the marketing activities of an organization that on any other phase of its operations. The political environment includes governmental and special interest groups that influence and limit various organizations and individuals in a given society. Organizations hire lobbyists to influence legislation and run advocacy ads that state their point of view on public issues. Special interest groups have grown in number and power over the last three decades, putting more constraints on marketers. The public expects



organizations to be ethical and responsible. An example of response by marketers to special interests is green marketing, the use of recyclable or biodegradable packing materials as part of marketing strategy (Gautam, 2008).

Technology; technology has a tremendous impact on our lives, Technological developments are the most manageable uncontrollable force faced by marketers. Organizations need to be aware of new technologies in order to turn these advances into opportunities and a competitive edge. Technology has a tremendous effect on life-styles, consumption patterns, and the economy. Advances in technology can start new industries, radically alter or destroy existing industries, and stimulate entirely separate markets. The rapid rate at which technology changes has forced organizations to quickly adapt in terms of how they develop, price, distribute, and promote their products (Gautam, 2008).

Competition; people basically buy want satisfaction in the form of product or service benefits. Adopting the marketing concept means that an organization must provide greater customer value than its competitors. Being good is not good enough if a competitor is better. It is impossible for an organization to develop strong competitive positioning strategies without a good understanding of its competitors and the strengths and weaknesses of the competitors (Gautam, 2008).

The external micro, three environmental forces are a part of marketing system but are external to the company. These are the firms market, suppliers, and marketing intermediaries. While generally classed as noncontrollable forces. These external elements can be influenced to a greater degree than the macro forces (Stanton, 1984).

The market; Organizations closely monitor their customer markets in order to adjust to changing tastes and preferences. A market is people or organizations with wants



to satisfy, money to spend, and the willingness to spend it. Each target market has distinct needs, which need to be monitored. It is imperative for an organization to know their customers, how to reach them and when customers' needs change in order to adjust its marketing efforts accordingly. The market is the focal point for all marketing decisions in an organization (Gautam, 2008).

Suppliers; are organizations and individuals that provide the resources needed to produce goods and services. They are critical to an organization's marketing success and an important link in its value delivery system. Marketers must watch supply availability and monitor price trends of key inputs. If there is a breakdown in the link between the organization and its suppliers, the result will be delays and shortages that can negatively impact the organization's marketing plans. On the other hand, positive and cooperative relationships between the organization and its suppliers can lead to enhanced service and customer satisfaction (Gautam, 2008).

Marketing intermediaries; Like suppliers, marketing intermediaries are an important part of the system used to deliver value to customers. Marketing intermediaries are independent organizations that aid in the flow of products from the marketing organization to its markets. The intermediaries between an organization and its markets constitute a channel of distribution. These include middlemen (wholesalers and retailers who buy and resell merchandise). Physical distribution firms help the organization to stock and move products from their points of origin to their destinations. Warehouses store and protect the goods before they move to the next destination. Marketing service agencies help the organization target and promote its products and include marketing research firms, advertising agencies, and media firms. Financial intermediaries help



finance transactions and insure against risks and include banks, credit unions, and insurance companies (Gautam, 2008).

Market Practice

In order to achieve your marketing objectives you need to have a strategy that includes different elements - the various parts of the marketing mix. Calling it a mix reminds you to try and get the balance right between the different elements. It is easy to assume that one part of the mix is wrong, when in fact it is another (Webber, N.D).

It is important for an organization to have a good understanding of the marketing mix. Each element is important when developing a marketing plan. (Michigan State University)

Product. Manufacturing is essential for generating wealth and improving the standard of living. Product development is a broad field of endeavor dealing with the design, creation, and marketing of new products. Sometimes referred to as new product development (NPD), the discipline is focused on developing systematic methods for guiding all the processes involved in getting a new product to market (Anonymous, N.D).

The product offered by an organization is what the business entity is all about. While we tend to think of products as object we can see and touch, the term product may be used in offering intangible service and ideas as well. Because products often have values for buyers that transcend their intrinsic qualities then product then is define as marketers offering as perceived by the market (Buell, 1984).

Managing product includes planning and developing the right products or service to be marketed by the company. Strategies are needed for changing existing products, adding



new ones, and taking other actions that affect the assortment of product carried. Strategic decisions are also needed regarding branding, packaging, and other various other product feature (Stanton, 1984).

What you are trying to sell to the customer. An organization needs to have an in depth understanding about what it is they are marketing. Development of the product's size, quality, design, brand name, and packaging are important when trying to match with customer's needs and wants. An organization should explain how their product's features benefit the customer (Chulick, n.d).

Price. The most of us price is the amount we pay a retailer as an exchange for a product. Retailer, of course, may charge what they wish since manufacturers legally cannot dictate the retailer's price. In pricing management must determine the right base price for its product. It must then decide on strategies concerning discounts, freight payments, and other price related variables (Stanton, 1984).

Entrepreneurs have different basis and strategies in pricing their products. To set specific price level that achieve their pricing objective, Managers may include other pricing method, and this methods include cost-plus pricing, target return pricing, value-base pricing, psychological pricing. Managers have the opportunities to design, innovate new pricing model that better meet the need of the firm and the consumers (Anonymous, 2007-2008).

What is the highest amount that the customer will pay for the product or service? Many times setting the incorrect price level is the beginning of the end for an organization. An organization must be sure that the price is not too high or too low. Mistakes either way will hurt the organization's income. When an organization is starting



out, it is important that they focus their price levels on breaking-even. A break-even analysis is necessary to determine the price to set to avoid a loss (Chuclick, n.d).

Promotion. Promotion covers all the activities involve in market communication and persuasion, namely, advertising, personal selling, sales promotion, and publicity. Promotion is the ingredient used to inform and persuade the market regarding a company's products (Stanton, 1984).

The method in which the customer will gain knowledge about the product and be persuaded to purchase it. There are many different types of promotional activities that can be used to help gain knowledge, exposure, and desire to purchase (Chuclick, n.d).

Place/Distribution. Even though market intermediaries are primarily a non controllable environmental factor, a marketing executive has considerable latitude when working with them. Management responsibilities is to select and manage the trade channels through witch the products will reach the right market at the right time and to develop a distribution system for physically handling and transporting the product trough this channels (Stanton, 1984).

Where the customer meets the product. The question is how does the customer get to that place? An organization needs to make sure the product or service they are offering is in the appropriate location where its target markets can reach. It is also important to look at the transportation that could be necessary to reach its customers and the geographical barriers that might exist. A B&B will not get many visitors if they have to travel on a poorly lit, gravel road (Chuclick, n.d).



Marketing Culture

Market Culture” is a relative term used to describe the attention an organization focuses on markets and the skills used to create value for customers.

Strong market culture firms believe the purpose of a business is to create superior customer value, profitably. Research shows that companies with a weak market culture deliver financial performance that is inferior to competitors with a strong market culture. (Anonymous, 2007).

Noella (2002) stated that in promote a marketing culture from the top. Partners should demonstrate a commitment to the importance of marketing to all personnel by sharing stories of marketing success at firm-wide and department meetings, developing expectations and tracking systems for time spent on marketing initiatives, and providing incentives for personnel who bring in accounts. Create a strategic plan. Develop and use a strategic marketing plan as a blueprint for activities throughout the year. Develop a personal marketing program. A program can empower each individual to set clear business development goals, widen their professional network, and learn how to approach and close a new account. Train your people. Professional service providers can increase their ability and comfort with bringing in business when they receive training regularly. Develop a strong brand. Present your culture and capabilities at their best to the public. Share information about your brand, culture, and philosophies to all personnel at orientations and firm meetings so they become true ambassadors when dealing with the public. Get help from marketing consultants. Accountants often do not know where to begin when it comes to marketing. Start by discussing your culture and business goals in relation to market opportunities (Noella, 2007).



Aspect of Product Development

Product development is a broad field of endeavor dealing with the design, creation, and marketing of new products. Sometimes referred to as new product development (NPD), the discipline is focused on developing systematic methods for guiding all the processes involved in getting a new product to market. There are a number of organizations dedicated to supporting product development professionals, such as the Product Development and Management Association (PDMA) and the Product Development Institute (PDI). According to the PDMA, the organization's mission is "to improve the effectiveness of people engaged in developing and managing new products - both new manufactured goods and new services. This mission includes facilitating the generation of new information, helping convert this information into knowledge which is in a usable format, and making this new knowledge broadly available to those who might benefit from it" (Anonymous, 2008).

Multiple changes that took place in the marketplace in recent years, such as shortening product life cycles and increasingly virtual and extended supply chains, have made it more challenging for companies to successfully complete product development initiatives. To meet these challenges, companies must continue to develop Product Development processes and exploit information technology, while focusing on both effectiveness (doing the right things) and efficiency (doing things right) in addressing innovation and product development (The Product Development Challenge, 2005).



Product Innovation

Innovations had better be capable of being started small, requiring at first little money, few people, and only a small limited market. The myth that products are developed by lone geniuses in their labs, who turn sudden inspiration into practical innovation "wasn't quite true even in Thomas Edison's day, and it certainly isn't true today," writes Michael Hammer.² "Reality is far more complex. Talent and inspiration are necessary but not sufficient. To create and launch nearly any new product today requires skills." Product/service innovation is the result of bringing to life a new way to solve the customer's problem – through a new product or service development – that benefits both the customer and the sponsoring company (Drucker, n.d).

Entrepreneurship

Entrepreneurship is vital for stimulating economic growth and employment opportunities in all societies. The culture of a community also may influence how much entrepreneurship there is within it. Different levels of entrepreneurship may stem from cultural differences that make entrepreneurship more or less rewarding personally. A community that accords the highest status to those at the top of hierarchical organizations or those with professional expertise may discourage entrepreneurship. A culture or policy that accords high status to the "self-made" individual is more likely to encourage entrepreneurship (Holden, 2007).

Supply Chain

People use different names for chains of activities and organizations. When they emphasise the operations, they refer to the process; when they emphasise marketing, they



call it logistic channel; when they look at the value added, they call it value chain, when they see how customer demands are satisfied, and they call it demand chain. And when it is emphasizing the movement of the materials and will use the general term of supply chain. A supply chain consists of the series of activities and organization that materials move through on their journey from initial supplier to final customer. In reality, organization does not work from isolation, but each one acts as a supplier, and then it acts as a supplier when it delivers material to its own customers. Every product has its own unique supply chain, and these can be both long and complicated (Waters, 2003).

Structure of the Supply Chain

The simplest view of a supply chain has a single product moving through series of organization, each of which somehow adds value to the product. Taking one organization's point of view, activities in front of it moving materials inwards are called upstream; those after the organization moving materials outward are called downstream. In practice, most organizations get materials from many different suppliers, and sell products to many different customers. Each product has its own supply chain, and there is a big huge number of different configurations. Supply chain diverges to meet demand from different type of customer. Then the supply chain divides into separate strands with the same product following alternative routes (Waters, 2003).

Supply chain exist to overcome the gaps created when supplier are some distant away from customers. They allow operations that are best done or can only be done at locations that are distant from customers or source of materials. Moving materials between geographically separate operations, supply chain allows mismatches between



supply and demand. When there is excess supply, stocks are build-up in the supply chain (Waters, 2003).

Enterprise Diversification

Diversification is an effective way of reducing income variability. It is the combining of different production processes. For instance, diversification can include different crops, combinations of crops and livestock, different end points in the same production processes. For instance, diversification can include different crops, combinations of crops and livestock, different end points in the same production process (such as different selling weights), or different types of the same crop (such as yellow, white, waxy, or high-protein corns). Diversification can also be achieved through different income sources, such as off-farm employment for smaller farms. Effective diversification occurs when low income from one enterprise is simultaneously offset by satisfactory or high incomes from other enterprises. It typically reduces large year-to-year variations in income. However, diversification is becoming increasingly costly, as capital investment requirements become greater. Diversification can ensure adequate cash flow for meeting production costs, debt obligations, and family living needs (Murphy, 2005).

Definition of Terms

Apiary. It is a place where bees are kept, a collection of hives or colonies of bees kept for their honey.

Apiculture. It is keeping of bees especially on large scale.

Culture. It is a set of shared attitudes, values, goals, and practices that characterizes an institution or organization.



Innovation. It is the introduction of something new idea, method or device.

Market. It is a meeting together of people for the purpose of trade by private purchase and usually not by action.

Marketing. It is an aggregate of functions involved in moving goods from producers to consumers.

Product. It is something that is marketed or sold as a commodity.

Radical. It is relating to or constituting a political group association with views, practices, and policies of extreme change.

Value. It is a fair return or equivalent in good, services, or money for something exchange.

Supply chain. It is coordination of operations with all the companies involved in the entire sequence of suppliers that contribute to the creation and delivery of a product or service. Effective supply chain management can provide an important competitive advantage for a business marketer, resulting in improved communication and involvement among members of the chain, increased motivation, and decreased costs.



METHODOLOGY

Locale and Time of the Study

The study was conducted in Ambiong La Trinidad Benguet, at the Kerobee farm and with its outlet located in LaTrinidad and Baguio City. The study was conducted on January 2009.

Research Instrument

Interview guide for Kerobee farm, outlet, and end-user was prepared and used in collecting data and relevant information. Contained in the interview guide for Kerobee are Questions related to its marketing practices. Question in the interview guide for outlets were on the problems encountered in selling Kerobee products.

Respondent of the Study

The respondent of the study was Kerobee's owner/proprietor and other personnel involved with marketing of products in market development, key personnel of the major Kerobee outlets and some end-users.

Data Collection

Primary data was gathered through personal interview with the use of interview guides. Secondary data was gathered using media documentation on Kerobee or the apiculture industry. The marketing channels and supply chain for Kerobee products was traced and documented. Then interview was done with key personnel of the major outlet for Kerobee products and some of the end-users.



RESULT AND DISCUSSION

Historical Background of the Firm

Kerobee farm started in 1992, having only 5 colonies and 5 hives boxes of bees in La Trinidad with a working capital of P20,000. The owner Mr. Romeo Awas Kimbungan, focus more on honey production. His products before are honey and honey wines which are through fermentation.

As of now he has 200 colonies and 400 hive boxes, and other machines and equipment for his business like carpentry machine, planer, extractor, honey filter, tanks, foundation molder machines, and also a car used for delivery. Kerobee can produce 2.5 tons of honey in the whole year but still not enough to meet the demand of the market. He personally manages the business, with the help of his one steady worker, and sometimes his 3 pull out workers which are his relative. The Kerobee objective is to continue to serve the market, producing apiary products that are organic.

Production of Honey

Table 1 shows the different activities in producing honey, artificial feeding is applicable only in the month of May-October where flowering plants are few and it will take two people to feed the 200 colonies in five different places, once in every week. Brood rearing is done by two people once in every week, the treatment of the disease can be done by two people twice in a year and the last activity in producing honey is harvesting which is done by two person in five days in the different places of the farm.

There are problems Mr. Kimbungan encountered in the production of honey this are, the birds eating bees, theft, storm's and disease cause by the mite's. He can manage



some difficulties like the birds eating bees, by using fire works, but according to him it is not practical because it is too expensive. He can also manage the disease cause by mites by managing the colony properly and according to him the mite's are born together with the egg while the egg grew the mite also grew. The space that the bee egg should occupy it is being occupied by the mites eggs. But he manages this by using a beehive with smaller hole exactly for the bee egg only. This will prevent the egg mites to grow together with the bee egg.

Table 1. Activities in producing honey

ACTIVITIES	HUMAN LABOR	FREQUENCY
Mild Feeding	2	Once a week
Brood Rearing	2	Once a week
Treatment of Disease	2	Twice a year
Harvesting	2-3	Five times a year



Products of Kerobee Farm

Table 2 shows the different products of Kerobee farm the year introduced and the description for each product. Mr. Kimbungan develops different products that assure good quality by using organic materials for the health benefits of the consumer.

Table 2. The different products of Kerobee farm

PRODUCTS	WHEN INTRODUCED	DESCRIPTION
Honey		
pure honey	1997	100% pure natural honey
creamed honey	2000	100% pure natural none pasteurize honey. It has natural ingredient
calamansi with honey	2000	No preservatives, pure honey and fresh Calamansi
Bee Pollen		
bee pollen propolis (human consumption)	2006	The most complete nutrient from honeybee, the perfect food of life. It has complete vitamins, minerals, enzymes, amino acid and natural anti-bacteria
bee pollen propolis (cock breeding)	2007	For better Cock breeding
Tea		
banaba herbal tea w/ honey	2003	It lowers blood sugar, reduce weight, help regulate blood pressures, good for the kidneys, aids the digestive system



Table 2. Continued...

PRODUCTS	WHEN INTRODUCED	DESCRIPTION
Gipas herbal tea w/ honey	2003	Popular tea in the Cordillera Used as alternative medicine for diarrhea and it is relative of green tea
Lemon grass herbal tea w/ honey	2004	Organic, cleans body toxins, rich in vitamin C, reduces fever, stomach cramps and eases arthritis pain
Yakon herbal tea w/ honey	2005	Made from organic materials
Dandelion herbal tea w/ honey	2002	It helps prevent formation of kidney stone
Strawberry herbal tea w/ honey	2004	elevates the rate of urination, it can cure diarrhea, arthritis, rheumatic and soothes the stomach
Wine		
Honey wine	1997	Pure natural honey with dandelion, banaba, lemon grass and fermented in indigenous yeast.
Rice wine w/ honey	2004	Organic rice with pure honey. It is fermented in indigenous yeast.
Honey blue berrywine	2006	Organic honey with wild organic blue berry and forest water. Fermented in indigenous yeast.
Shiitake wine w/ honey	2008	Organic Shiitake with pure natural honey. Fermented in indigenous yeast.



Packaging

Mr. Kimbungan is buying his packaging materials (bottles) from SMB or from Asia Brewery. He chose SMB and Asia Brewery because they are the only producer of standard bottles in the Philippines. He ensures safe product delivery to the market for the end-users, the packaging serves a number of different functions including preservation, containment, and convenience, the labeling of his product packaging protects the contents against environmental, physical, and mechanical hazards, during storage and distribution. Packaging contains the food and keeps it secure until it is used. Packaging is also a means of providing useful information to the consumers; it also serves as a communication to the firm. In addition, food packages provide convenience they unitize or group products together in useful amounts, have features like easy opening, dispensing, resealing after use, and so on. Finally, a successful, effective food package should fulfill many other requirements. Mr. Kimbungan contract Printing Press to print the designs for his packagings. It provides a way of identifying the contents, attractive or eye-catching packaging helps to sell the product, and it provides a means of fulfilling any regulatory requirements concerning labeling of foods.

Inbound and Outbound Logistic of Kerobee Farm

The supplies of raw materials is the inbound logistic, and the shipment of Kerobee farm to the different outlet is the out bound. Mr. Romeo Awas Kimbungan chooses BSU Marketing Center, LATOP, and Good Shepherd as his main outlets because of the reasons that they are accessible to buyers, they sale fast, they pay on time, they have good cooperation and they have good reputation, the good reputation of the farm reflects on the quality of his products. La Trinidad Organic Products (LATOP) sells only organic base



products while Benguet State University (BSU) marketing center is going to organic products and Good Shepherd are more concerned in the quality of the product they are selling, this are the qualities of the outlet that reflects on his product. The qualities of the outlet will reflect on Mr. Kimbungan's product

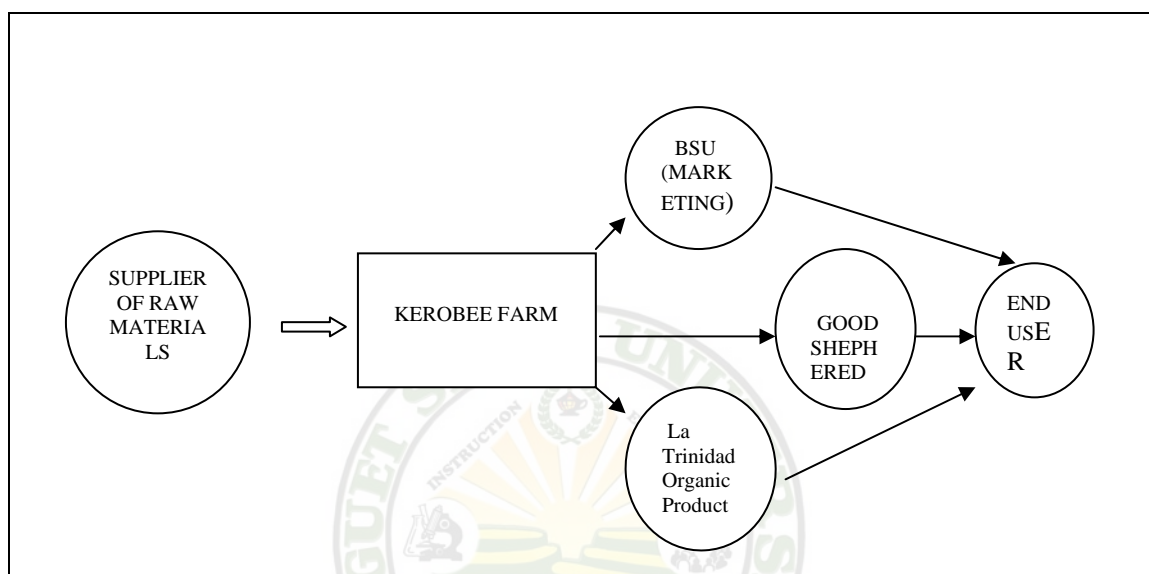


Figure 1. Inbound and outbound logistic of Kerobee farm

Marketing

Delivering of Kerobee product is done by Mr. Kimbungan himself to his 3 different respective outlet, one in Baguio (Mines View, Good Shepherd) and two in LaTrinidad (km.5, Benguet State University marketing and LaTop). The products are transported to the outlet through his own car.

The price of honey, bee pollen, and tea's are base on the production cost and the wines are base on the market price. There is a high demand of honey but low supply that's one reason why the price of apiary products is too high.



Promotion activities done by Kerobee are advertising specifically in radio (DZWT) every Friday. He also joins local trade faire and distributes flyers to give more information about the product.

Table 3 shows the scheduled delivery of Kerobee farm to its outlet depends if the market outlet has disposed the products.

Products of the Kerobee Farm Being Sold at Different Market Outlet

Table 4 shows the different products of Kerobee farm and what products the different outlets are selling. BSU Marketing Center is almost selling all the products of Kerobee farm except for the bee pollen for cocks, because it is not accessible to the buyers. LATOP are Selling Pure honey, creamed honey, Calamansi with honey, Bee pollen Propolis (for human consumption and cock), they only sell some tea this are lemon grass herbal tea with honey, Yacon herbal tea with honey and Dandelion herbal tea with honey because of the reasons that this products are accessible to the buyers in Km.5. Good Shepherd don't sell wines and bee pollen because it is not accessible to the buyers.

Table 3. Scheduled delivery of products to the outlets

OUTLETS	Schedule
BSU Marketing Center	Once a Month
LATOP	Twice a Month
Good Shepherd	Every Week



Table 4. List of products of the Kerobee farm being sold at different market outlet

PRODUCTS OF KEROBEE	BSU MARKETING CENTER	LATOP	GOOD SHEPERED
Honey			
Pure honey	/	/	/
creamed honey	/	/	/
Calamansi with honey	/	/	/
Bee Pollen			
Bee pollen Propolis (man consumption)	/		
Bee pollen propolis (cock consumption)		/	
Tea			
Lemon grass herbal tea with honey	/	/	/
Yakon herbal tea with honey	/	/	/
Dandelion herbal tea with honey		/	/
Strawberry herbal tea with honey	/		/
Gipas herbal tea with honey	/		/
Wines			
Shiitake wine with honey	/		
Rice wine with honey	/		
Honey wine	/		
Blue berry Wine with honey	/		

Problem Encountered in Marketing Kerobee Products

Problems encountered in Marketing Kerobee products are, in BSU Marketing Center they have Problem in Bureau of Food and Drugs (BFAD) License, it ensure the safety, efficacy, purity, and quality of processed foods, drugs, diagnostic reagents, medical devices, cosmetics and household hazardous substances through state-of-the-art technology, as well as the scientific soundness and truthfulness of BFAD license, this can



affect the preference of buyers in buying Kerobee products. In LaTop the problem that they encountered is the consumer more prefer per pieces instead of box because according to them it is more affordable than those in the boxes. In Good Shepherd they did not encounter any problem in selling Kerobee products. Production information for the protection of public health that Kerobee farm don't have

Actors in the Supply chain

Kerobee farm. They are the one who produce honey, process, package and transport in the different outlet.

Individual consumer. They are the buyers of Kerobee product for food consumption, beverage and also for present. Most consumers are tourist according to the different outlets. Consumer respondent of this study have indicated a high satisfaction on the quality of the products they acquire from the different outlet

Retailers. Retailers (BSU, LaTop, and Good Sheered) sell to the end-user; they also help in marketing Kerobee product. They influence buyers on choices.

Other Actors in the Supply Chain

Supplier packaging materials. They provide standard packaging materials for Kerobee farm. The payment is in cash term basis and they also offer discount

General Product Flow for Kerobee Products From the Kerobee Farm to the Different Outlets to the End-Users

Figure 2 show the general product flow for Kerobee products from the Kerobee farm to the different outlets to the end-users.



Kerobee farm, the different outlets (LaTop, BSU marketing center, and good shepherd) and the end-user shares different information. Kerobee farm shares information about the products like it is organic, clean and use of pure honey and organic materials. Kerobee farm chooses the different outlet because of this reasons; accessibility of buyer's, fast sale's, they pay on time; they have good reputation, and have good cooperation's. The outlet shares information such as when to deliver, what products are easily dispose and what are not, they also serve as the bridge of buyers feedback to Kerobee farm. The end-user are mostly tourist, 100% of them are 30 years old and above.

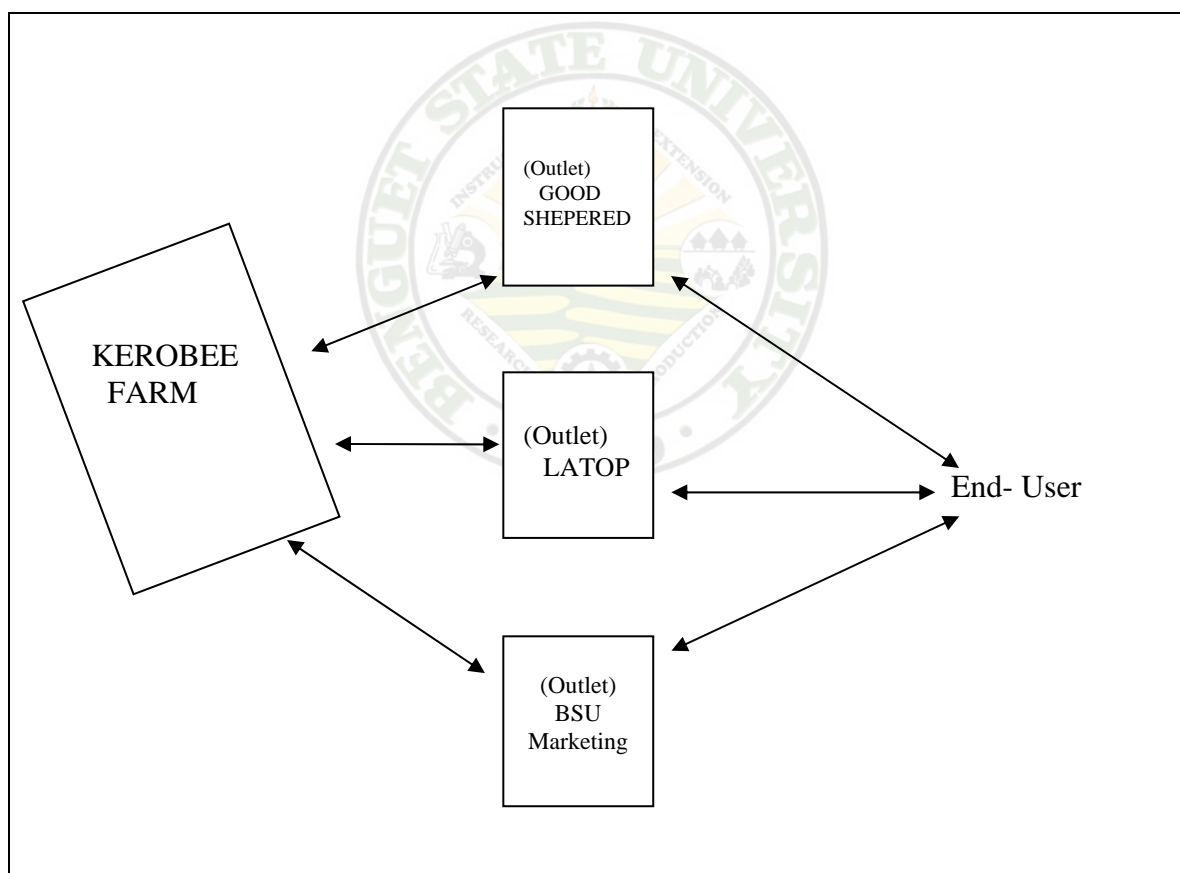


Figure 2. Product Flow from Kerobee farm to end-User



Table 5. Roles and function activities of key actor in the supply chain and value-Adding activities of Kerobee products

ACTOR	ROLE	FUNCTIONS/VALUEADDING ACTIVITIES
Kerobee Farm	Apiary product Producer	Production of honey Processing Packaging Transporting Selection of outlet
Retailers (BSU, LATOP, Good Shepherd)	Link between Kerobee farm and the end-user	Purchase Kerobee product required Display prepared product influence buyers for choice For storage of the product Introduce and promote product to the consumer
Individual Consumer	End-user	Choose and purchase preferred product
Other Participant in the Chain		
Packaging Supplier	Makes standard packaging materials for Kerobee products	

Value Adding Activities

Making the honey products available to the end-user certainly requires value adding activities on the part of Kerobee farm and retailers.

Aside for producing honey, Kerobee farm also have lot of activities before distributing their product to the outlet, there will be Mild Feeding, Brood Rearing, Treatment of Disease, extraction of honey, fermentation, processing, packaging, and transporting to the different outlets. All of this is added to the value of the product.

Another way of adding value to the product is through storage of the products.



Kerobee outlets also function to maintain a familiar place (display area) from which buyers could find the product easily, and they influence buyers as to what they should be buying. For making sure that there are readily available Kerobee products for the end-user to simply pick-up, the retailers shoulder the risk of tied-up funds on maintaining inventory.

Product Payment and Information Flows

Mr. Romeo Awas Kimbungan acquire information on technology from the internet, And attended Different seminars one is the seminar conducted by the LATOP on the technology in how to engage in organic beekeeping. And there are cases where he learns from doing experiments/trials in his farms.

For the price of the product, Kerobee base it on the production cost (honey, tea) and in the prevailing market price (wine). The high price of his product according to him shows that Kerobee product has a high quality. The outlets pay the products upon receiving it by check basis.

Through the availability and accessibility of outlet to communication facilities like cell phone and land line (call) that Kerobee have the knowledge when to deliver products to his different outlets, Kerobee also deliver products on time this avoids out of stocks in the outlets.

Since most of the end-users are tourist the retailers influence the end-users as to what they should purchase for their needs.

The kinds of information shared are more on delivery the time of delivery, what products to be deliver and the quantity to be delivered.



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was conducted to describe the supply chain adapted by Kerobee farm, Determine main players of Kerobee farms in supply chain and identify the performance of Kerobee farm in terms of its marketing. The study was conducted in Ambiong La Trinidad Benguet at the Kerobee farm and with its three major outlets located in Baguio City and La Trinidad. The respondents were [personally interviewed with the aid of open and close ended questionnaire.

Kerobee farm started in 1992, having only 5 colonies and 5 hives boxes of bees in La Trinidad with a working capital of P20, 000. The owner Mr. Romeo Awas Kimbungan, focus more on honey production. His products before are honey and honey wines which are through fermentation.

As of now he has 200 colonies and 400 hive boxes, and other machines and equipment for his business like carpentry machine, planer, extractor, honey filter, tanks, foundation molder machines, and also a car used for delivery. Kerobee can produce 2.5 tons of honey in the whole year but still not enough to meet the demand of the market. He personally manages the business, with the help of his one steady worker, and sometimes his 3 pull out workers which are his relative. The Kerobee objective is to continue to serve the market, producing apiary products that are organic.

The different activities in producing honey are mild feeding, brood rearing, treatment of disease, and harvesting. The problems encountered in production of honey are the birds eating bee's, theft, storm, and disease cause by mite's, Mr. Kimbungan can manage some of the problems like the birds eating bee's and the disease cause by mite's.



The different product of Kerobee farm are honey, bee pollen, tea and wine, they are all made of organic materials. It has different health benefits for the consumers and it assures good quality.

In marketing of Kerobee products there are problems encountered this are lack of BFAD licenses that ensures safety, efficacy, purity, quality of process foods, diagnostic reagents, medical devices, cosmetics and hazardous substance through innovating, and that some consumers prefer more tea's per pieces instead of per box for it is more convenient.

The actors of the supply chain of Kerobee products are Kerobee farm, one producer of honey, they process package and transport in the different outlets. The individual consumers, they are the buyers of Kerobee products for food consumption, beverage, and also for present. Retailers (BSU marketing center, LATOP, Good Shepherd) sell to end-users; they also help in marketing Kerobee products and influence buyers on choices. Lastly the supplier of packaging materials that provide standard packaging for Kerobee farm.

Mr. Romeo Awas Kimbungan acquire information on technology from the internet, And attended Different seminars one is the seminar conducted by the LATOP on the technology in how to engage in organic beekeeping. And there are cases where he learns from doing experiments/trials in his farms. For the price of the product, Kerobee base it on the production cost (honey, tea) and in the prevailing market price (wine). The high price of his product according to him shows that Kerobee product has a high quality. The outlets pay the products upon receiving it by check basis. Through the availability and accessibility of outlet to communication facilities like cell phone and land line (call)



that Kerobee have the knowledge when to deliver products to his different outlets, Kerobee also deliver products on time this avoids out of stocks in the outlets. Since most of the end-users are tourist the retailers influence the end-users as to what they should purchase for their needs. The kinds of information shared are more on delivery the time of delivery, what products to be deliver and the quantity to be delivered.

Conclusions

Based on the findings of this study the following conclusion are drawn

1. Kerobee farm produce products based on what it's proprietor sees as beneficial to the health of its consumer. The farm constantly adds to its product liner
2. The different apiary products are sold to the different outlet which are the BSU marketing center, LATOP, and Good Shepherd, are chosen by Mr. Kimbungan because he sees these outlets as appropriate representative of his products to the consumers, that is, organic based and healthy products.
3. The marketing channels have problem regarding the lack of BFAD license of Kerobee farm that assures the safety, efficacy purity and quality of process foods, drug diagnostic, reagents, medical devices, cosmetics and house hold hazardous substance through innovation process of Kerobee farm.
4. Some consumers prefer to purchase tea per piece because it is more convenient than those in boxes.

Recommendations

1. Kerobee farm's culture of producing consumer friendly products laudable. This attitude should be continued. However, in order to better understand and serve the



consumers, the farm needs to determine the acceptability of their products and scan for the specific preferences of the consumers. This will help them in decision as to what innovations must be done or what product lines to be added.

2. Kerobee farm should acquire BFAD license in order to expand his market and for the assurance of the consumers that his products are safe and has, efficacy, purity, and a good quality.

3. The farm should consider offering products in sizes or forms more convenient to consumers.



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APPENDIX

Communication Letter

Benguet State University
College of Agriculture
Department of Agriculture Economics
and Agribusiness Management
La Trinidad Benguet

Sir/Madam:

Warm greetings!

The undersigned is a fourth year student Bachelor of Science in Agribusiness (BSAB) student majoring in Enterprise Management. I am presently conducting a research entitled "SUPPLY CHAIN OF KEROBEE PRODUCTS" in partial fulfillment for the requirement of the course AB200.

In this connection, I ask a portion of your precious time to answer the attached questionnaire. Please answer it correctly and honestly for the success of this study. Rest assured that information you will give be kept with utmost confidentiality.

Thank you very much for your cooperation.

Respectfully yours

JANICE I. QUITOYAN
Researcher

Noted by:

CLIFTON D. LLANES
Adviser



APPENDIX B.1

Survey Questionnaire
Kerobee Farm

1. What is the Business objective/goal of Kerobee?
2. How much is the beginning capital?
3. What are the beginning capitals of the firm?
4. What are the current capitals of the firm?
5. Where do you buy material use for the product?

Materials	Name of the firm (where)	Reason
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6. Where are the locations of the farm?
7. What are the activities in producing honey? How many human labors are required?
8. How do you choice your workers?
9. What are the problems encountered in producing honey?
10. What are the products offer, when introduced, modification, reasons and identified target market?
11. What are your promotion activities?
 - Advertising
 - Personal selling
 - Sales promotion
 - Publicity
 - Public relation
12. What Mode of selling communication?

__whisper “bulungan”	__by touch “radio”	__through agent
__personal negotiation with the seller		__hand held radio
__contact buyers through media like cell phone		
13. What are the information shared with the outlet? _____



14. What are the resources shared with the outlet? _____

15. Why did you chose your current outlet

Accessibility of buyer's
Hours open
Fast sales
Payment on time
They have good reputation
Have good cooperation

16. Do you suggest to retailers a selling price?

Yes No

17. Did you use price to penetrate the market? If yes, how?

offered at high price to convey high quality to target market
 Offered at comparatively low price

18. Where is your market outlet?

Products	Market outlet	Description

19. What is the method of sale?

Cash Barter
 Credit/partial payment Other pls. specify

20. How do you price your product?

Based on the prevailing market price of competing branch
 Mutually agreed price suggested retail price
 Base on the cost of raw materials retail price
 Premium pricing



APPENDIX B.2

B.2 Survey Questionnaire
Kerobee Outlet

Name of Business: _____

Location of Business: _____

Number of years selling Kerobee products:

 Less than one year One year Two years other; pls. specify

What products of Kerobee farm are you selling? _____

What products of Kerobee are easily disposed? _____

What products of Kerobee are not easily disposed? _____

What are the problems encountered in selling Kerobee products? _____

What possible solutions to the problem do you suggest? _____

How many times Kerobee deliver their products?

 once a month twice a month three times a month others, pls. specify

Who are the usual buyers of Kerobee products according to age, gender, civil status?

 Below 20 21-25 years old 26-30 years old above 30Male % female %Single % married % widowed % divorce %

Feedback of buyers on Kerobee product? _____

Information on Kerobee products for share to customer? _____

Terms and condition of Kerobee?

Delivery: _____

Pricing: _____

Schedule: _____

Regulation impose on Kerobee: _____

Type of information shared with Kerobee? _____

Type of support to Kerobee? _____

Reason for selling Kerobee product? _____

Source of information (marketing practices, pricing etc.)?

 radio (specify radio program) TV (specify TV program) organization (specify name of organization) buyers other store others pls. specify

APPENDIX B.3

Survey Questionnaire
Kerobee end-user

Name (optional): _____

Age: _____ Gender: _____

Marital Status: ___single ___married ___separated ___widowed

Educational Attainment:

___ No formal education ___elementary graduate ___high school graduate

___ Vocational graduate ___ college graduate ___ other, pls. specify

House hold size: _____

Annual house hold income: _____

Major source of Income: _____

Number of years you have been buying Kerobee products: _____

Reasons for buying Kerobee product? _____

Where do you buy Kerobee products? _____

Reason for choice of outlet: _____

What product of Kerobee do you buy often? _____

How often do you buy Kerobee Products? _____

Is the price worth the product?

___too expensive for its quality

___just right

___too low to reflect its quality

What are the benefits you get from the product? _____

Source of information on Kerobee product? _____

